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November 15, 2013

VIA ELECTRONIC & US MAIL

Ms. Stephanie Vaughn
ATTN: Lower Passaic River Remedial Project Manager
Emergency and Remedial Response Division
U.S. EPA, Region 2
290 Broadway, 19th Floor
New York, New York 10007

**Re: Monthly Progress Report No. 78 – October 2013
Lower Passaic River Study Area (LPRSA) Remedial Investigation/ Feasibility
Study (RI/FS)
CERCLA Docket No. 02-2007-2009**

Dear Ms. Vaughn:

de maximis, inc. is submitting this Monthly Progress Report for the above-captioned project on the behalf of the RI/FS Agreement Settling Parties (Cooperative Parties Group or CPG) pursuant to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement or AOC). The Progress Report satisfies the reporting requirements of Paragraph 42 of said Settlement Agreement.

(a) Actions which have been taken to comply with this Settlement Agreement during the previous month.

Meetings/Conference Calls

- On October 21, EPA and CPG held a conference call to discuss scheduling additional EPA/CPG coordination meetings.

Correspondence

- October 1 through October 28, CPG provided status reports to EPA on the Low Resolution Coring Supplemental Sampling Program 2 (SSP2) field activities.
- On October 3, CPG and EPA contractors exchanged emails regarding Lower Passaic River/Newark Bay (LPR/NB) model linkage issues.
- On October 4, CPG submitted to EPA results of the Third River sediment probing activities in support of the SSP2.
- On October 7, CPG and EPA's oversight contractor exchanged emails regarding the Third River sediment probing activities and the selection of additional Third River sediment sampling locations for the SSP2 field work.
- On October 9, CPG provided EPA a sediment probing map identifying three additional proposed sampling locations in the Third River for the SSP2 field work.

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- On October 9, EPA's oversight contractor concurred with CPG's proposed additional sediment sampling locations for the SSP2 field work but could not approve them due to the Government Shutdown
- On October 11, CPG submitted to EPA a proposed Field Modification to the SSP2 QAPP Addendum for the Third River sediment sampling locations requested by EPA's contractor on behalf of EPA.
- On October 11, CPG notified EPA of the suspension of the SSP2 field work for that day due to weather conditions.
- On October 11, CPG provided information to EPA contractors regarding the LPR/NB model framework topic for discussion following the resolution of the Government Shutdown period.
- On October 14, CPG and USACE exchanged emails regarding the schedule and approval for collecting the Third River SSP2 sediment samples.
- On October 15, CPG submitted the September Monthly Progress Report to EPA.
- On October 17, EPA approved the Third River SSP2 sampling locations.
- On October 21, CPG and EPA exchanged emails regarding a Field Modification (FM-131018-1) to relocate SSP2 sampling location 13B-0523 due to the presence of a utility crossing.
- On October 22 CPG uploaded the draft 2012 Toxicity Test Reference Data Report to the EPA SharePoint site.
- On October 22, EPA requested additional information from CPG on a data set utilized in the LPR/NB Modeling Program.
- On October 22, EPA approved the SSP2 Field Modification FM-131018-1 for the adjustment of coring location 13B-0523 and the collection of another sediment core (13B-578) north of location 13B-0547.
- On October 22, CPG provided EPA with the coordinates for the proposed additional sediment coring location 13B-0578. On October 23, CPG provided a suggested date of November 14 for the next EPA/CPG modeling collaboration meeting to EPA which was confirmed
- On October 23, EPA sent CPG a clarification letter regarding LPR/NB modeling efforts.
- On October 28, CPG notified EPA that the SSP2 field activities were complete.
- On October 28, EPA requested an update to the schedule for receiving the Field Modification for the additional SSP2 coring location 13B-0578 and collection of high resolution sediment cores at locations 13B-0547 and 13B-0578.
- On October 29, CPG posted the revised Risk Analysis and Risk Characterization (RARC) Plan and Appendix B to the Plan to the EPA SharePoint site.
- On October 30, CPG received a letter from EPA discussing modeling efforts for the LPRSA.
- On October 30, CPG posted the draft Background Sediment Chemistry Data Report to the EPA SharePoint site and sent the laboratory reports on CD to EPA's oversight contractor.
- On October 30, CPG responded to EPA's October 22 inquiry about a data set utilized in the LPR/NB Model.

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- On October 31, CPG and EPA exchanged e-mails regarding EPA's request for a risk assessment work plan to use in reviewing a Newark Bay QAPP for risk assessment-related sampling.

Work

- CPG conducted field activities for SSP2, concluding these activities on October 28.
- CPG initiated laboratory analysis of the SSP2 samples.
- CPG continued drafting a data report for the Chemical Water Column Monitoring (CWCM) Program.
- CPG continued development of the background and reference site example outline requested by EPA, which was submitted as part of Appendix B of the Revised RARC.
- CPG completed drafting a data report for the results of the upstream sediment chemistry testing associated with the Benthic Background Sediment Survey.
- CPG completed drafting a data report for the results of the upstream taxonomy enumeration associated with the Benthic Background Sediment Survey.
- CPG continued development of a preliminary Conceptual Site Model (CSM) deliverable.
- CPG continued baseline risk assessment activities (update CSM, complete benthic assessment, complete effects and exposure assessment and risk characterization for fish and wildlife assessments and start to write the BERA).
- CPG Modeling Team continued work on the RCATOX Chemical Fate and Transport Model Code initial conditions and long-term calibration runs.
- CPG Modeling Team continued work on the Bioaccumulation Model.
- CPG Modeling Team continued work on system understanding for hydrodynamic and sediment transport processes in Newark Bay.
- CPG continued review of sediment characteristics and potential target remedy locations in support of initial Feasibility Study (FS) evaluations.
- CPG continued development of appendices and supporting documents for the FS.

(b) Results of Sampling and Tests

- On October 21, CPG provided preliminary, unvalidated SSP2 data to EPA for core location 13B-547.

(c) Work planned for the next two months with schedules relating to the overall project schedule for RI/FS completion

- CPG will continue drafting the data report for the CWCM Program.
- CPG will continue laboratory analysis of the samples from SSP2.
- CPG will initiate validation of the analytical data from SSP2.
- CPG will continue drafting the Preliminary CSM Report.
- CPG will continue to complete baseline ecological risk assessment activities (update CSM, complete benthic assessment, complete effects and exposure assessment and

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risk characterization for fish and wildlife assessments, complete all lines of evidence as outlined in the RARC and start to write the BERA).

- CPG Modeling Team will continue calibration runs with the HQI ECOM-SEDZLJS and RCATOX codes and inputs.
- CPG Modeling Team will continue development of the Bioaccumulation Model.
- CPG Modeling Team will continue to support the CWCM program data evaluation.
- CPG will participate in LPR/NB Modeling Program progress calls and follow-up modeling collaboration meetings with EPA and EPA consultants.
- CPG will continue initial FS evaluation of targeted remedy locations.
- CPG will continue development of appendices and supporting documents for the FS.
- CPG will initiate drafting the Remedial Investigation (RI) Report.

(d) Problems encountered and anticipated problems, actual or anticipated delays, and solutions developed and implemented to address actual or anticipated problems or delays.

- Based upon discussions with Region 2, the CPG understood that Region 2 considered the calibration of the HQI sediment transport and the chemical fate and transport model sufficient to support the revised FFS for the lower 8 miles of the LPRSA in the fall of 2012. Furthermore, the CPG understands that Region 2 received comments related to the FFS model both from the NRRB review conducted in December 2012 and the model peer review in February and March 2013. The CPG has requested that Region 2 provide the results of both the NRRB review and model peer review especially the comments that may be pertinent to the CPG's LPR/NB model development and is awaiting Region 2's decision on releasing the comments. Finally, the CPG understands that it may require up to six months for Region 2's Modeling Team to incorporate, calibrate and re-run the model based on the NRRB and peer review comments received by Region 2 through the spring of 2013. To date, Region 2 has declined the CPG's requests to provide model-related comments from either review. The CPG is continuing to work on both sediment transport model and the chemical fate and transport model for the LPRSA and incorporating the improvements and other changes that CPG has discussed with Region 2. Region 2 and CPG collaboration meetings were conducted throughout 2012 and in February 2013; this most recent and previous meetings are providing an opportunity for both modeling teams to understand differences between each team's approaches. In January, the CPG provided a detailed technical memorandum on its progress on the LPR/NB sediment transport modeling to Region 2; the current code and input and output files have also been provided, as discussed on February 28. EPA provided Newark Bay SedFlume data and FFS Model input files in March. Delays associated with both the sediment transport modeling and chemical fate and transport modeling schedules are extending the completion of the LPRSA RI/FS. As a result of the July 24 meeting with EPA HQ and Region 2, the CPG has developed and submitted a meeting schedule for the Region's review to address outstanding issues with the LPR/NB models related to sediment transport, chemical fate and transport and bioaccumulation to occur during the third and fourth quarters of CY 2013.

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On October 23, Region 2 provided a letter which purports to provide their understanding of the modeling being conducted by the CPG in support of the Sustainable Remedy and RI/FS. The CPG does not agree with some of the statements made in this letter and is composing a response, but agrees with Region 2 that a meeting planned for November 14 to brief Region 2 on the working version of the LPR/NB Model used for the evaluation of the SR and Region's FFS alternatives should occur. The November 14 meeting will address OSWER's July 24 request that Region 2 understand the modeling conducted by the CPG is warranted as well as Region 2's proposal to provide routine and regular oversight meetings of the development of the LPR/NB Model for the LPRSA RI/FS and NBSA RI/FS.

- The CPG understands that Region 2 approved TMO's CSO/SWO Workplan in May 2011. It is also the CPG's understanding that the Method Detection Studies proposed by TMO and other work such as construction of the proposed mobile centrifuge/CSO sampling trailer required for Phase 1 work were completed in late August 2012. It is also the CPG's understanding that the EPA and TMO had agreed in late 2012 to delay the Phase 1 CSO sampling due to the failure of the PVSC treatment system and other regional POTWs. Furthermore, the CPG understands that delays to CSO Phase 1 sampling were caused by TMO inability to receive permission for the discharge of CSO effluent from its trailer back to the CSO from initially PVSC and then municipalities. Finally, TMO did not complete the Phase 1 CSO Sampling in May 2013 as outlined in its latest schedule submitted to Region 2. TMO did collect an initial sample from the Clay Street CSO on June 10; however, the CPG has identified a number concerns with this effort that it plans to share with EPA. Additionally, the CPG understands that the municipal access issues are unresolved and will further delay completion of Phase 1. The extent to which the LPRSA RI/FS schedule may be impacted by the ongoing delays in the Phase 1 sampling schedule is significant. Moreover, there are likely to be significant delays of the Phase 2 CSO field schedule that will prevent a timely completion of the TMO CSO Study and adversely impact the timely completion of the LPRSA RI/FS. Specifically TMO's revised CSO Study schedule indicates that validated data from Phase 2 will be available in late 2015, one year after the anticipated Draft RI report submission in 2014 and FS submission in 2015. TMO's CSO schedule is an unacceptable delay to the LPRSA RI/FS schedule as demonstrated by their inability to complete the Phase 1 work this spring and summer. Furthermore, TMO is unable to conduct the work consistent with the EPA-approved QAPP as demonstrated during the June 10, 2013 sampling event at Clay Street. Therefore, the reliability and value of these data are questionable. The CPG detailed these issues and other concerns regarding TMO's CSO Study in its July 5, 2013 letter to Region 2. The CPG is evaluating alternative approaches for CSO/SWO data to be used in the LPR/NB Chemical Fate & Transport Model to maintain a LPRSA RI/FS Study completion date of first quarter 2015.
- Region 2 provided comments on July 11, 2011 which disapproved the revised risk assessment planning documents and required submission of revised documents within 30 days. Additionally, Region 2 provided a technical memo on July 25, 2011 on fish and crab consumption rates for the LPRSA Human Health Risk Assessment. The CPG filed a notice of dispute resolution in accordance with Section XV of the AOC on July 25,

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2011 in response to Region's July 11, 2011 directive letter and July 25, 2011 technical memorandum. The revised RARC and TRV deliverables were submitted on August 9, 2011. On September 6, 2011 the CPG submitted a position paper in response to EPA's July 11, 2011 comments and July 25, 2011 technical memorandum. Dispute resolution meetings were held on December 1, 2011 and January 13, 2012. Region 2 provided the results of the dispute resolution to the CPG on February 7, 2012 and the CPG implemented the changes specified in the July 2011 directive comments and the results of the dispute resolution in the revised RARC which was submitted on April 13, 2012. Region 2 provided comments on the revised RARC on August 30, 2012; the CPG met with Region 2 on January 7, 2013 to discuss remaining background and reference issues and had a telephone call with EPA on January 28 to discuss cooking loss.

Since early in 2013, Region 2 has promised to provide revised definitions for background and reference that the CPG can include in the revised RARC. These definitions were received by the CPG on June 28. It is the CPG's understanding that the issuance of the revised definitions was held-up by the NJDEP, NOAA and US FWS which did not accept definitions that are otherwise acceptable to the Region and the USACE, and which appear to be acceptable to the CPG based on the CPG's understanding of the revised definitions. The CPG has reviewed the June 28 definitions with the Region. Following CPG review and discussions and clarifications with the Region on August 8, the CPG resubmitted the revised final RARC, incorporating the June 28 definitions, on October 29 to Region 2 for final approval.

- The CPG was directed in 2009 by EPA to develop a single QAPP for surface water sampling for both the LPRSA and NBSA. At that time, the TMO parties were still members; the TMO parties left the CPG in May 2012. However, Occidental is the respondent to the NBSA AOC. The CPG followed the direction of the EPA and performed three separate programs, including developing QAPPs for the Physical Water Column Monitoring and Small Volume and High Volume Chemical Water Column Monitoring programs (in fact the High Volume program was implemented after TMOs departure). The CPG voiced its concerns to EPA that this involved both (1) different operable units of the Diamond Alkali NPL site and (2) different respondents to the respective AOCs – EPA did not address the CPG's concerns. In order to effectuate EPA's directive for synoptic sampling in the River and Newark Bay, the CPG agreed to allow Tierra, on behalf of Occidental, to use its contractor. However, subject to the terms of a letter agreement between the CPG and Tierra, the responsibility for the work in Newark Bay would be solely Tierra's. After authorizing and paying for Newark Bay work, Tierra stopped responding to the CPG's contractor task authorization requests starting in March 2013 and has not made any payments since mid-May. As a result of Tierra's failure to pay, the CPG's contractor is owed over \$1 MM in outstanding invoices and an estimated \$1.5 MM in labor and expenses associated with NBSA sampling (for a total of \$2.5 MM). In August, with EPA's approval, the CPG paid over \$1 MM in outstanding invoices from the LPRSA Trust. Until the remaining invoices are paid and the CPG is compensated for its payment, the CPG and its contractor will not provide any NBSA data to TMO and believes that EPA should take the same position. If EPA requires these data to be included in the LPR/NB Model as planned and the invoices are not paid then

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the schedules to complete the LPRSA RI/FS and the LPR/NB Model could be adversely impacted.

- On March 3, 2009, pursuant to EPA's November 13, 2008 comments provided to CPG, a revision to the August 2008 Feasibility Study Work Plan (FSWP) was submitted. To date, Region 2 has not provided written comments or approval on the revised March 2009 FSWP. Region 2 and CPG had previously agreed to have a meeting in October 2013 on the FSWP which was prevented by the Government Shutdown. It was agreed to have the FSWP meeting in December 2013.

If you have any questions, please contact me or Rob Law at (908) 735-9315.

Very truly yours,

de maximis, inc.

Willard F. Potter / cfc

Willard F. Potter
Project Coordinator

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